

Remarks

The present application describes a WDM transmitter that is pumped by an array of diode-lasers (10). The power from each individual diode-laser can be passed into one of the M inputs of a M x N multiplexor (20). The multiplexor can share the cumulative power of the diode-laser array between its N outputs. In this way, the multiplexed pump source can provide a level of immunity to power degradation of an individual diode-laser. The multiplexed diode-laser pump source can be used to pump an array of fibre lasers (30), each of which can be designed to emit radiation at a different wavelength. The output from each individual fiber laser can then be modulated to carry information. Finally, the multiple wavelengths from the fiber laser array can be combined into a single output (80).

With regard to the claim rejections set forth in the Office Action, the Examiner primarily relies on Giles et al. U.S. Patent No. 5,241,414 (hereinafter **Giles**). **Giles** discloses a fault tolerant optical amplifier arrangement that comprises M diode lasers ($11_1 \dots 11_M$). The power from the diode lasers is coupled into a M x N star coupler (13), and then equally separated between N outputs. The N outputs of the M x N star coupler supply pump power to N optical amplifiers ($15_1 \dots 15_N$). The pump power is supplied to the optical amplifiers ($15_1 \dots 15_N$) by N optical waveguides ($14_1 \dots 14_N$). It is noted that the optical waveguides are passive devices used to transmit the pump power (column 2, lines 64-66), and are not fiber lasers, as discussed in paragraph 2 of the Office Action.

In the Office Action the Examiner contended that **Giles** anticipates claims 1-3. The undersigned respectfully disagrees. The arrangement disclosed in **Giles** appears to be exclusively related to optical amplifiers used as repeaters for optical transmission systems, and thus **Giles** is not related at all to a WDM transmitter. A WDM transmitter as set forth in claim 1 utilizes a fiber laser array to produce a plurality of optical signals, each at a different wavelength $\lambda_1, \lambda_2, \dots \lambda_N$. Each signal is modulated separately and, as the wavelength of each signal is different, transmitted on the same output without interference between the signals. Thus, the subject matter of claim 1 is clearly novel over **Giles**.


The fundamental deficiency of **Giles** as a teaching reference vis-a-vis the remaining claims is not overcome by the other applied references. There simply is lacking any motivation or suggestion to modify **Giles** in a manner that could give rise to the subject matter of the claims.

Without prejudice, claims 12-15 have been cancelled and thus the rejection as to these claims is now moot.

In view of the foregoing, request is made for timely issuance of a notice of allowance.

Respectfully submitted,

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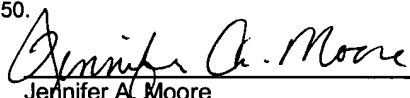
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